

**From:** (b) (6)  
**Sent:** Friday, August 26, 2016 3:46 PM  
**To:** HarborComments  
**Subject:** Comments from CETCO regarding Portland Harbor Superfund Site Proposed Plan – June 2016  
**Attachments:** removed.txt

Comments regarding the Portland Harbor Superfund Site Proposed Plan – June 2016

Please accept these comments from me as an authorized representative for CETCO Environmental Products. CETCO provides technologies for the remediation of contaminated sediment sites. Our past experience on the Willamette River includes McCormick and Baxter, Terminal 4 Port of Portland, GASCO and Zidell Barge Launch.

The following comments were noted during review of the proposed plan.

P 27. Significantly Augmented Reactive Cap. Consideration of the use of low permeability materials in capping PTW should be done with an abundance of caution. Adding a low permeability layer to a cap where active groundwater flow carrying contamination is present will likely result in redirecting the groundwater flow rather than containing it.

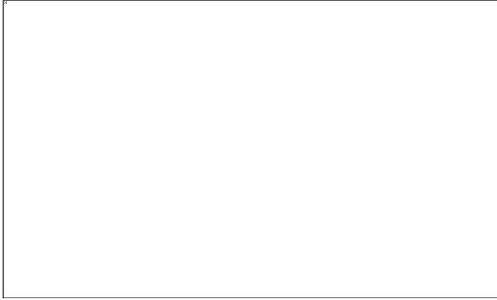
P 35. Navigation Channel and FMD Region. The proposed plan primarily calls for dredging in this region, unless NAPL and/or PTW that cannot be contained cannot be removed from the dredge area. In that case the plan calls for “(sand plus activated carbon)” as a reactive residual layer. This active ingredient should not be limited to activated carbon. Organoclay is proven to have a higher organic compound sorption capacity than activated carbon. Other sorptive or reactive materials may also be appropriate depended on the COC.

P 64. Preferred Alternative. Capping using engineered and armored caps... The paragraph goes on to describe the use of proprietary technology for areas where cap thickness may need to be reduced under structures. A proprietary technology should not be called out by name. Other commercial technologies are available such as the use of bentonite chips, BentoBlock or others.

P 65. Estimated volumes. What is the basis of these estimates? Organoclay mats are available in units of area, not volume (square foot vs CY). What is the actual estimate of Organoclay Mat? AquaBlok is mentioned in the description of an engineered cap, however only when cap thickness is needed to be reduced under structures. There is no discussion of how many structures there are or where they are. Again what is the basis of the estimate for Aquablok? There are no other mentions of AquaGate +10%PAC anywhere in the proposed plan. Why is this proprietary product called out? What function is it intended to serve? What is the basis of the quantity estimate? The reference to AquaGate should be eliminated.

Thank you for your consideration of these comments.

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Vadose Remediation Technologies/CETCO



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